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9 September 1968

MEMORANDUM FOR THE RECORD

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SUBJECT: U-2R Demonstrated Maximum Altitude Profile

REF : IDEA-0657-68 Same Subject

1. Paragraph 2 of reference compared the U-2R Model Specification range and altitude performance with the results of S/N 055, flight 23, after the flight data were corrected to a standard day temperature of -56.5°C and were extrapolated to a fuel remaining of 108 gallons at begin descent. This extrapolation may have erroneously conveyed the impression that the U-2R aircraft, today, is capable of cruising at altitude to a fuel remaining value of 108 gallons prior to initiation of descent whereas, in fact, the aircraft range capability is somewhat degraded because 50 gallons of the fuel is unuseable, i.e., it cannot be pumped out of the tanks and into the engine. Therefore accounting for this 50 gallons unuseable quantity and correcting the flight results of S/N 055, flight 23, to a standard day temperature of -56.50C, the comparison to the Model Specification performance is as follows:

Range to begin descent - N.M.
Altitude at begin descent - Ft.
Fuel remaining at begin descent
Gals.

2. The comparison cited in paragraph 2 of the reference was intended only to present to potential performance capability of the U-2R if a satisfactory solution to the 50 gallon unuseable fuel problem can be found.

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